

Application No. 09/414,483
Amendment dated December 3, 2004
Reply to Office Action of August 16, 2004

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-46 (cancelled)

Claim 47 (new):

In combination in a building structure:-

a vertical length of lumber;

a horizontal length of lumber; and

a metal corner connector interposed between and interconnecting said vertical and horizontal lengths;

said corner connector comprising a box-shaped intermediate section;

said intermediate section having opposite vertical side walls, a horizontal top wall and a horizontal bottom wall;

said corner connector including a horizontal flange projecting from one of said vertical side walls and a vertical flange projecting upwardly from said horizontal side wall; and

said vertical and horizontal lengths of lumber extending at right angles to and in abutment longitudinally thereof with said horizontal top wall and said one of said side walls, respectively and being in face-to-face contact, laterally thereof, with said vertical and horizontal flanges, respectively.

Application No. 09/414,483
Amendment dated December 3, 2004
Reply to Office Action of August 16, 2004

Claim 48 (new):

A building structure as claimed in claim 47, wherein said horizontal length of lumber is one of a pair of horizontal lengths of lumber, and said horizontal flange is one of a pair of horizontal flanges projecting from mid-sections of respective ones of said vertical side walls and fitting snugly on respective ones of said pair of horizontal lengths of lumber.

Claim 49 (new):

A building structure as claimed in claim 47, wherein said vertical flange projects from a mid-section of said horizontal top wall and said vertical length of lumber is one of a pair of vertical lengths of lumber in contact with opposite sides of said vertical flange and in longitudinal abutment with said horizontal top wall.

Claim 50 (new):

A building structure as claimed in claim 48, wherein said vertical flange projects from a mid-section of said horizontal top wall and said vertical length of lumber is one of a pair of vertical lengths of lumber in contact with opposite sides of said vertical flange and in longitudinal abutment with said horizontal top wall.

Claim 51 (new):

A building structure as claimed in claim 47, wherein said vertical length of lumber has a longitudinal side surface flush with said one of said vertical side walls and said horizontal length has a longitudinal side surface flush with said horizontal bottom wall.

Claim 52 (new):

Application No. 09/414,483
Amendment dated December 3, 2004
Reply to Office Action of August 16, 2004

A building structure as claimed in claim 50, wherein said vertical lengths of lumber each have a longitudinal side surface flush with a respective one of said vertical side walls and said horizontal lengths each have a longitudinal side surface flush with said horizontal bottom wall.

Claim 53 (new):

A building component, comprising:

a plurality of lengths of lumber connected together to form a rectangular frame around an opening;

a foam material provided in said opening;

a reinforcement skin of solidified composite material adhering to said lengths of lumber and to said foam material at one side of said frame;

said reinforcement skin extending over said lengths of lumber at said one side of said frame and also over said opening, whereby said rectangular frame is reinforced by said reinforcement skin against the action of racking forces on said rectangular frame; and

metal corner connectors interposed between and interconnecting said lengths of lumber at corners of said rectangular frame;

said corner connector comprising a box-shaped intermediate section;

said intermediate section having opposite vertical side walls, a horizontal top wall and a horizontal bottom wall;

said corner connector including a horizontal flange projecting from one of said vertical side walls

Application No. 09/414,483
Amendment dated December 3, 2004
Reply to Office Action of August 16, 2004

and a vertical flange projecting upwardly from said horizontal side wall; and

said lengths of lumber comprising vertical and horizontal lengths of lumber extending at right angles to and in abutment longitudinally thereof with said horizontal top wall and said one of said side walls, respectively, and being in face-to-face contact, laterally thereof, with said vertical and horizontal flanges, respectively.

Claim 54 (new):

A building component as claimed in claim 53, wherein said reinforcement skin extends over the entirety of said one side of said frame.

Claim 55 (new):

A building component as claimed in claim 53, wherein said reinforcement skin overlaps and adheres to the periphery of said rectangular frame.

Claim 56 (new):

A building component as claimed in claim 53, wherein said reinforcement skin overlaps and adheres to an opposite side of said frame.

Claim 57 (new):

A building component as claimed in claim 53, wherein said composite material is reinforced with fiber.

Application No. 09/414,483
Amendment dated December 3, 2004
Reply to Office Action of August 16, 2004

Claim 58 (new):

A building component as claimed in claim 53, including a fiber mesh reinforcing said composite material.

Claim 59 (new):

A method of making a building component, which comprises the steps of:-

connecting together a plurality of vertical and horizontal lengths of lumber to form a rectangular frame extending around an opening;

providing a foam material in said opening;

installing metal corner connectors at corners of said rectangular frame to connect said lengths of lumber to one another;

said corner connectors each comprising a box-shaped intermediate section, said intermediate section having opposite vertical side walls, a horizontal top wall and a horizontal bottom wall, and said corner connectors each including horizontal flanges projecting from said vertical side walls and a vertical flange projecting upwardly from said horizontal top wall;

locating said vertical and horizontal lengths of lumber at right angles to and in abutment longitudinally thereof with said horizontal top walls and said side walls, respectively, and in face-to-face contact, laterally thereof, with said vertical and horizontal flanges, respectively; and

applying a coating of liquid composite material to one side of said frame and to said foam material in said opening and allowing said composite material to solidify in adherence with said lengths of

Application No. 09/414,483
Amendment dated December 3, 2004
Reply to Office Action of August 16, 2004

lumber and said foam material at said one side of said rectangular frame to form a reinforcement skin extending over said lengths of lumber, said opening and said foam material at said one side of said frame so as to reinforce said rectangular frame against racking forces.

Claim 60 (new):

A method as claimed in claim 59, which includes reinforcing said composite material with fiber reinforcement.

Claim 61 (new):

A method as claimed in claim 59, which includes placing a mesh of fiber reinforcement material over said one side of said rectangular frame and said foam material and subsequently coating said mesh with said coating material during the step of applying said coating material so that said coating material impregnates said mesh.

Claim 62 (new):

A method as claimed in claim 59, wherein the flanges are arranged to extend between pairs of said lengths of lumber.